

**Notice of Allowability**

Application No.

10/775,241

Examiner

CUONG H. NGUYEN

Applicant(s)

BAN ET AL.

Art Unit

3661

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/25/06 (the amendment).
2. ☒ The allowed claim(s) is/are 1-13; the submitted formal drawings are accepted.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

CUONG H. NGUYEN  
Primary Examiner  
Art Unit: 3661

***DETAILED ACTION***

1. This Office Action is the answer to the amendment received on 9/25/2006.

**Status of the claims**

2. Claims 1-13 are pending.

***Priority***

3. This application claims a Japanese priority of 2/19/2003 (2003-41628).

***Allowable Subject Matter & Reasons for Allowance***

4. Independent claims 1, 5, and 11 are patentable over the references of Hashimoto et al. (US Pat. 6,732,044), in view of Hosaka et al. (US Pat. 4,339,801) because these references do not disclose a method, an electrical control unit (ECU), or a control system for mediating transmission of data frames from two direct bus-connected vehicular electronic control units onto a common bus connected to only one of said ECUs, requested data being provided from both of said ECUs to another vehicular electronic unit over said common bus, comprising:

transmitting said first and second frames of data with transmission priority being assigned alternately to first and second frames currently ready for transmission.

Hashimoto et al.'s reference is directed to a vehicular ECU has a core IC that generates control signals based on the input signals received from control object devices and digital signals received from the first and second ancillary ICs and outputs the control signals to the control object devices. The first and second ancillary ICs respectively receive low-speed digital signals and analog signals connected to the core IC, such that serial communication is performed with each other. The first ancillary IC outputs the digital signals received by the indirect parallel input circuit to the core IC through the

first sub station serial-to-parallel converter. The second ancillary IC outputs the digital signals processed by the multi-channel analog-to-digital (A-D) converters to the core IC through the second sub station serial-to-parallel converter. This structure is used for fuel supply control of vehicle engine. There is no teaching of transmission priority of data frames.

Hosaka et al. disclose a motor vehicle microprocessor - has input stage, central control unit, ROM and RAM assembly and output stage with connectable testing system which can trigger alarm. The microprocessor system can be used in a motor vehicle for controlling various vehicle implements and for testing the control system elements after installation in the vehicle. The microprocessor has an input stage, a central processor unit, a memory assembly with several read-only memories and a random access memory for storing the control programmers. Various sensors transmit their respective signals, in response to which the memory system carries out the control of various motor vehicle implements. The microprocessor has a programmed testing device for its input stage, the memory system and its output stage. The testing device is alternately connectable to the microprocessor, with which it can be operated. The testing program may contain a part related to the vehicle state. The testing result may be contained in a print-out supplied by a device cooperating with the testing device and the microprocessor. In addition an alarm signal may be triggered, if required by the testing results.

In those references, there is no teaching of transmission priority of data frames.

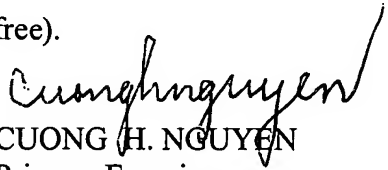
5. Claims 2-4, 6-10, and 12-13 are allowed because they are dependent on claims 1, 5, and 11 (in that order).

***Conclusion***

6. Claims 1-13 are patentable..
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG H. NGUYEN whose telephone number is 571-272-6759 (or email. cuong.nguyen@uspto.gov). The examiner can normally be reached on 9:30 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THOMAS G. BLACK can be reached on 571-272-6956. The Rightfax number for the organization where this application is assigned is 571-273-6956.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
CUONG H. NGUYEN  
Primary Examiner  
Art Unit 3661